CORNALATUS ATTEMS, 1931 (DIPLOPODA, POLYDESMIDA): PROPOSED DESIGNATION OF CORNALATUS PERMUTATUS ATTEMS, 1938 AS TYPE SPECIES. Z.N.(S.)2438

By Richard L. Hoffman (Radford University, Radford, Virginia 24142, U.S.A.)

The present case involves a generic name in the Diplopoda (millipedes), erroneously based upon the type species of a much older name which is still in use for a genus in a different family. The case is therefore referred to the Commission under Article 70b.

2. In 1860 Henri De Saussure (p. 326) established the name *Rhachidomorpha* as a new subgenus of *Polydesmus* Latreille, 1802, including only the new species *Polydesmus* (*Rhachidomorpha*) tarascus De Saussure, 1860 (p. 327), which is therefore the type of *Rhachidomorpha* by monotypy. This species (from Cordova, Mexico) was described solely in terms of its external appearance, and no information about the structure of the male genitalia was given. The subgenus was distinguished chiefly by the form of the metazonal paranota, said to be '... longuement séparées, insérées au sommet des flancs, réfléchies en haut (montantes), plus ou moins spiniformes...'.

3. In reporting on a collection of polydesmoid millipedes belonging to the Hamburg Museum, Attems (1901, p. 95) reported what he considered to be the same species as De Saussure's, from the Brazilian state of Espirito Santo. In that paper, Attems transferred *Rhachidomorpha* from *Polydesmus* to the new status of a subgenus in *Leptodesmus* Saussure, 1859, viz., '*Leptodesmus (Rhachidomorpha) tarascus* Sauss.'. Having an adult male, Attems illustrated the genitalia with two reasonably accurate drawings showing that the species that he had examined was in fact referable to the family CHELODESMIDAE. His species identification was obviously based upon a general concurrence in paranotal structure with that described by De Saussure for his Mexican form.

4. In 1931, Attems (p. 40) without explaining his motivation, proposed the new generic name *Cornalatus* with sole included species, and hence type species by monotypy, '*tarascus* (Sauss.)'. To supplement the written diagnosis, he provided very similar drawings to those published in 1901.

5. Seven years later, Attems (1938, p. 61) again treated *Cornalatus*, citing his 1931 proposal of the name, but now specifying that the 'Einzige Art und Typus' was *Cornalatus permutatus* Attems. This new specific name was, at the same time (same page), proposed as a *nomen novum* to replace his own earlier usage of *tarascus*, which he now clearly stated was 'nec Saussure'. In a later volume of the same journal (*Das Tierreich*), Attems (1940, p. 471) also treated *tarascus* De Saussure as the type and only species of the genus *Rhachidomorpha*, considered correctly to be a component of the endemic Mesamerican family RHACHODESMIDAE. In his 1938 treatment, Attems used the same two drawings of genitalia to represent his *permutatus* that he had already used in 1931.

6. In his book on the generic and family-group names of Diplopoda, Jeekel (1971, p. 255) stated that *Polydesmus tarascus* De Saussure, 1860, was the type species of *Cornalatus* by original designation, and that *Cornalatus* is in consequence a junior objective synonym of *Rhachidomorpha*.

7. It is my opinion however that the circumstances set out in paragraphs 3-5 above show that the original identification of the Brazilian species as *tarascus* was obviously incorrect, as later realized by Attems himself. His consistent use of virtually identical gonopod illustrations, and use of the expressions 'nom. nov.' and 'nec Sauss.' in the 1938 treatment, show clearly that he realized his mistake and attempted to rectify it. Except for these extenuating circumstances Jeekel's interpretation of the matter would of course be correct.

8. Cornalatus has been subsequently accepted as a valid genus for Brazilian millipedes by Attems (1943), Schubart (1955, 1956) and Hoffman (1980). Its suppression as a junior synonym of *Rhachidomorpha* would not only entail its transfer into a different family (from CHELODESMIDAE to RHACHODESMIDAE) but also require that a new name be proposed for the genus now known as *Cornalatus*.

9. It is my belief that minimal disruption of usage and intent would ensue from a ruling that would continue the existence of *Cornalatus* as a valid chelodesmid generic name by recognizing that its original foundation upon the species *tarascus* De Saussure was the result of a misidentification of the latter by Attems.

10. The International Commission of Zoological Nomenclature is accordingly asked:

- to use its plenary powers to set aside all previous designations of type species for the nominal genus *Cornalatus* Attems, 1931 and to designate *Cornalatus permutatus* Attems, 1938 as type species;
- (2) to place on the Official List of Generic Names in Zoology the name Cornalatus Attems, 1931 (gender: masculine), type species, by designation under the plenary powers in (1) above, Cornalatus permutatus Attems, 1938;
- (3) to place on the Official List of Specific Names in Zoology the name *permutatus* Attems, 1938, as published in the binomen *Cornalatus permutatus* (specific name of the type species of *Cornalatus* Attems, 1931).

REFERENCES

- ATTEMS, C. 1901. Neue Polydesmiden des Hamburger Museums. Mitt. naturh. Mus. Hamburg., vol. 18(2), pp. 85–107.
- 1931. Die Familie Leptodesmidae und andere Polydesmiden. Zoologica Stuttg., vol. 30(79), pp. 1–149.

 1938. Myriapoda 3, Polydesmoidea II. Fam. Leptodesmidae, Platyrhachidae, Oxydesmidae, Gomphodesmidae. *Tierreich*, vol. 69, pp. 1–487.

- 1940. Myriapoda 3, Polydesmoidea III. Fam. Polydesmidae, Vanhoeffeniidae, Cryptodesmidae, Oniscodesmidae, Sphaerotrichopidae, Peridontodesmidae, Rhachidesmidae, Macellolophidae, Pandirodesmidae. *Tierreich*, vol. 70, pp. 1–577.
- 1943. Myriopoden von Brasilien, gesammelt von E. Bresslau in den Jahren 1913/1914. Senckenbergiana, vol. 26, pp. 434–458.
- HOFFMAN, R. L. 1980. Classification of the Diplopoda. Genève, Mus. Hist. natur., pp. 1-237.
- JEEKEL, C. A. W. 1971. Nomenclator generum et familiarum Diplopodorum: A list of the genus and family-group names in the Class Diplopoda from the 10th edition of Linnaeus, 1758, to the end of 1957. *Monogr. ned. entomol. Ver.*, no. 5, pp. 1–412.
- DE SAUSSURE, H. 1860. Essai d'une faune des myriapodes du Mexique, avec la description de quelques espèces des autres parties de l'Amérique. Mém. Soc. Phys. Hist. nat. Genève, vol. 15(2), pp. 259-393.
- SCHUBART, O. 1955. Materiais para uma fauna do Estado de São Paulo. Os Leptodesmidae. Arg. Mus. Nac. (Rio de Janeiro), vol. 42, pp. 507–540.
 - 1956. 'Leptodesmidae' Brasileiras II. O genero 'Obiricodesmus' (Diplopoda, Proterospermophora). *Rev. Brasil Biol.*, vol. 16, pp. 341–348.